ABSTRACT OF THE DISCLOSURE

The present invention provides a blood treatment device and methods of blood treatment to provide an individual patient with the most suitable blood treatment and reduced treatment duration. Specifically, the invention provides a blood treatment device comprising a treating means 11 that treats blood collected from a patient; a measuring means 12 that measures parameters of the patient's blood and indicates blood condition; a controlling means 13 that controls the treatment procedures based upon the blood parameters; a storing means 15 that records an ideal patient-specific blood parameter curve for the treatment duration; and a directing means 14 that directs the control by the controlling means 13 so that the measured blood parameters approximate to the ideal blood parameter curve by comparing the measured blood parameters with the ideal blood parameter curve recorded by the storing means 15.